

SYSTEM, METHOD, AND APPARATUS FOR REDUCING CODE PHASE SEARCH SPACE

ABSTRACT OF THE DISCLOSURE

A GPS communication system including a server and a client, each
5 including a GPS receiver, for reducing the code phase search space of the GPS
receiver of the client. The communication system includes a transmitter for
transmitting timing information from the server to the client to help the client
locate a first satellite, and a receiver for using timing differences between the
satellites to synchronize and locate other satellites. The code phase search
10 space is reduced by reducing the number of phase hypotheses that must be
calculated to establish communication between the server and the client.